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"Um Novo Mecanismo de Compartilhamento de Recursos para Transmissão de Vídeo com Alta Interatividade e Experimentos "

Recent new technology developments made possible the use of real time multimedia applications. Nevertheless these applications have strict time demands and need enough bandwidth to guarantee the desirable QoS. To minimize these problems there are some techniques that can be applied to servers. This work introduces the characteristics of multimedia servers, the RIO server architecture and the resources sharing techniques taken from literature, that were studied to improve the efficiency of resource sharing and consequently to offer QoS to the users application. In orde to minimize these server bandwidth required to transmit the media, the patching technique was incorporated into the RIO server architecture. Thus, the clients share the server bandwidth through multicast transmissions. We also developed in cooperation with the LAND/UFRJ lab, a new and Efficienty resource sharing tecnique to support users interactive operations. A Windows client application was developed to RIO to allow the use of this platform in another operating system. Moreover, a real load emulator was developed in RIO server to test its efficiency in distance learning applications. The results, gathered from the emulator and from a model, developed by the LAND/UFRJ, were analyzed and compared. This work focuses on distance learning, more specifically the CEDERJ project where the RIO server will be used to store and distribute the record movies during the courses.